

ALEXANDER NECKAM, CLERGYMAN AND NATURALIST OF THE TWELFTH CENTURY

Although he was the foster-brother of Richard Coeur de Lion, Alexander Neckam (1157-1217) managed to obtain some fame of his own in the field of learning. According to Wright¹ he taught school at Dunstable, studied and taught at Paris, traveled some, joined the Augustinians, and became abbot of Cirencester in 1213. Neckam's interests were broad, embracing theology, medicine, law and the liberal arts, and his numerous writings, most of them still in manuscript, include works on classical mythology, grammar, the Bible, Aristotle and literary and scientific treatises. He thought quite highly of scientific effort, and in a passage in his "*De Naturis Rerum*" states that "Science is acquired at great expense, by frequent vigils, by great expenditure of time, by sedulous diligence of labor, by vehement application of mind." Nor did he shrink from all of Aristotle's scientific theories, in spite of his clerical training.

According to Wright, Neckam's "*De Naturis Rerum*," or "The Nature of Things," may be looked upon "as an interesting monument of the history of science in Western Europe and especially in England during the latter half of the twelfth century," although written in a saintly and moralizing style. Natural phenomena are described, such as the spots on the moon, vacuums, planets, medieval inventions, etc., and according to Gunther,² "In his choice of animals Neckam selected such as were neither too commonly known to the vulgar, nor totally unknown. Beginning with the crocodile, serpent, rhinoceros, viper, toad, weasel, fox, ape, bear, wolf, deer, camel, elephant, dragon, lion, onager, and hyena, he reaches the 'noble animal' man, with an interesting disquisition on sight, and refraction and reflection of light by glass mirrors. He explains that since man withdrew his obedience from his Creator, the obedience of the greater

¹ *De Naturis Rerum*, edited by Thomas Wright, 1863, London.

² *Early Medical and Biological Science*. Oxford, 1926.

number of wild animals has been withdrawn from him; but to reprove and abate his pride, the power of tormenting him has been given to some of the most insignificant of animated things. Gnats attack him in the eyes . . . ; fleas disturb his sleep at night and his contemplations by day; flies intrude into the liquors he drinks and into the food he eats. Moreover, if man had not sinned, there would have been no venomous or poisonous thing on the earth. After this discourse on Man, he proceeds to treat of domestic animals including bees and silkworms, given to man after the Fall out of compassion for the human race."

Wright states that much of Neckam's for the most part credulous animal accounts was taken from the writings of Solinus, Isidore and Cassiodorus, but Thorndike³ calls attention to the fact that in many passages, Neckam cites no authorities, and in such cases he should be given credit for his originality. Gunther says that Neckam added many of his own observations. Cassiodorus (circa 497-575), a philosopher and man of letters, was governor of Sicily and secretary to Theodoric and Solinus, who lived supposedly during the time of Augustus, was a Latin grammarian whose "Polyhistor" contained so many extracts from Pliny, in Pliny's style, that it earned for him the name "Ape of Pliny." Isidore, who lived from about 560 or 570 to 636, and was bishop of Seville about 600, was the author of a dictionary known as the "Etymologiæ" in which the words are arranged under subjects. Like most dictionaries, it was largely a compilation. Neckam alludes frequently to Aristotle, Euclid, Plato, the church fathers, Augustine, Jerome, Basil, Gregory, etc., and for his time his knowledge was considerable, although it included many things that are now regarded as absurd.

In a religious manuscript by Neckam still extant at Oxford, there is a closing statement, the first sentence of which is: "Perchance, O book, you will survive Alexander, and worms will eat me before the book-worm gnaws you,"⁴ which is exactly what happened.—HARRY B. WEISS.

³ History of Magic and Experimental Science, 1923, New York.

⁴ Thorndike, *l. c.*